We claim:

1. A composition comprising an expression vector bound to an aggregated protein-polycationic polymer conjugate, wherein the expression vector comprises a promoter polynucleotide sequence operatively linked to a polynucleotide sequence encoding an antigen.

2. The composition of claim 1 wherein the polynucleotide sequence encoding the antigen is a fragment of a genome or gene selected from the group of genomes or genes associated with a disease consisting of infectious disease, cancer, and autoimmune disease.

3. The composition of claim 2 wherein the polynucleotide sequence encoding the antigen is a fragment of a genome or gene selected from the group of pathogenic genomes consisting of virus, bacterium, fungus and protozoa.

4. The composition of claim 3 wherein the polynucleotide sequence encoding the antigen is a fragment of a genome selected from the group of viral genomes consisting of HIV, HSV, HCV, influenza and RSV.

5. The composition of claim 2 wherein the polynucleotide sequence encoding the antigen is a fragment of a gene selected from the group of genes associated with an autoimmune disease consisting of rheumatoid arthritis, vasculitis, and multiple sclerosis.

6. The composition of claim 1 wherein the aggregated protein is albumin.

7. The composition of claim 1 wherein the polycationic polymer is selected from the group consisting of polyamino acids, polyimines or a combination thereof.

8. The composition of claim 7 wherein the polyimine is polyethyleneimine.

9. The composition of claim 1 wherein the expression vector contains a heterologous mammalian targeting sequence.

10. The composition of claim 9 wherein the heterologous mammalian targeting sequence is ubiquitin or a signal sequence for secretion.

11. The composition of claim 10 wherein the signal sequence for secretion is human growth hormone.

12. A method of producing a DNA vaccine comprising the step of incubating an expression vector with an aggregated protein-polycationic polymer conjugate to form DNA particles wherein the expression vector comprises a promoter polynucleotide sequence operatively linked to a polynucleotide sequence encoding an antigen.

13. The method of claim 12 wherein the polynucleotide sequence encoding the antigen is a fragment of a genome or gene selected from the group of genomes or genes associated with a disease consisting of infectious disease, cancer, and autoimmune disease.

14. The method of claim 13 wherein the polynucleotide sequence encoding the antigen is a fragment of a genome selected from the group of pathogenic genomes consisting of virus, bacterium, fungus and protozoa.

15. The method of claim 14 wherein the polynucleotide sequence encoding the antigen is a fragment of a genome selected from the group of viral genomes consisting of HIV, HSV, HCV, influenza and RSV.

16. The method of claim 13 wherein the polynucleotide sequence encoding the antigen is a fragment of a gene selected from the group of genes associated with an autoimmune disease consisting of rheumatoid arthritis, vasculitis, and multiple sclerosis.

17. The method of claim 12 wherein the expression vector contains a heterologous mammalian targeting sequence.

18. The method of claim 17 wherein the heterologous mammalian targeting sequence is ubiquitin or a signal sequence for secretion.

19. The method of claim 18 wherein the signal sequence for secretion is human growth hormone.

20. The method of claim 12 wherein the polycationic polymer is selected from the group consisting of polyamino acids, polyimines or a combination thereof.

21. The method of claim 19 wherein the polyimine is polyethyleneimine.

22. The method of claim 12 wherein the aggregated protein is albumin.

23. A method of treating a condition in an organism by administering to the organism the DNA vaccine of claim 12.

24. The method of claim 23 wherein the administration of the vaccine is to a mucosal surface.

25. The method of claim 24 wherein the mucosal surface is selected from the group consisting of intranasal surface, oral surface, gastrointestinal and genitourinary tract surface.

26. The method of claim 23 wherein the vaccine is administered parenterally.

27. The method of claim 26 wherein the administration is intraperitoneal, intravenous, subcutaneous, intramuscular and intradermal.

28. A method of inducing an immune response in an organism comprising the step of administering to an organism an expression vector bound to an aggregated protein-polycationic polymer conjugate wherein the expression vector comprises a promoter polynucleotide sequence operatively linked to a polynucleotide sequence encoding an antigen.

29. The method of claim 28 wherein the immune response is systemic.

30. The method of claim 28 wherein the immune response is mucosal.

31. The method of claim 28 wherein the immune response is both systemic and mucosal.

32. A method of inducing an immune response in an organism comprising the step of co-administering to an organism an expression vector bound to an aggregated protein-polycationic polymer conjugate wherein the expression vector comprises a promoter polynucleotide sequence operatively linked to a polynucleotide sequence encoding an antigen and a cytokine expression vector.

33. The method of claim 32 wherein the cytokine expression vector contains the sequence for GM-CSF.

34. The method of claim 32 wherein the cytokine expression vector contains the sequence for IL12.

35. The method of claim 32 wherein the co-administration is to a mucosal surface.

36. The method of claim 35 wherein the mucosal surface is selected from the group consisting of intranasal surface, oral surface, gastrointestinal surface and genitourinary tract surface.

37. The method of claim 32 wherein the co-administration is parenterally.

38. The method of claim 37 wherein the administration is intramuscular and intradermal.

39. A method of inducing an immune response in an organism comprising the step of administering to an organism an expression vector bound to an aggregated protein-polycationic polymer conjugate wherein the expression vector comprises a first promoter polynucleotide sequence operatively linked to a first polynucleotide sequence encoding an antigen and a second polynucleotide sequence encoding a cytokine.

40. The method of claim 39, wherein the first and second polynucleotide sequences are under transcriptional control of the same promoter polynucleotide sequence.

41. The method of claim 39, wherein the first and second polynucleotide sequences are under transcriptional control of different promoter polynucleotide sequences.

42. A method of introducing genes into a cell comprising the steps of: forming a DNA particle comprising an expression vector bound to an aggregated protein-polycationic polymer conjugate wherein the expression vector comprises a promoter polynucleotide sequence operatively linked to a polynucleotide sequence encoding an antigen; and incubating the cells with the DNA particle under conditions wherein the cells take in the DNA particle.

43. A composition comprising an expression vector bound to a protein-polycationic polymer suspension, wherein the expression vector comprises a promoter polynucleotide sequence operatively linked to a polynucleotide sequence encoding an antigen.

44. The composition of claim 43, wherein the polynucleotide sequence encoding the antigen is a fragment of a genome or gene selected from the group of genomes or genes associated with a disease consisting of infectious disease, cancer, and autoimmune disease.

45. The composition of claim 44, wherein the polynucleotide sequence encoding the antigen is a fragment of a genome or gene selected from the group of pathogenic genomes consisting of virus, bacterium, fungus and protozoa.

46. The composition of claim 45, wherein the polynucleotide sequence encoding the antigen is a fragment of a genome selected from the group of viral genomes consisting of HIV, HSV, HCV, influenza and RSV.

47. The composition of claim 44 wherein the polynucleotide sequence encoding the antigen is a fragment of a gene selected from the group of genes associated with an autoimmune disease consisting of rheumatoid arthritis, vasculitis, and multiple sclerosis.

48. The composition of claim 43 wherein the protein is albumin.

49. The composition of claim 43 wherein the polycationic polymer is selected from the group consisting of polyamino acids, polyimines or a combination thereof.

50. The composition of claim 49 wherein the polyimine is polyethyleneimine.

51. The composition of claim 43 wherein the expression vector contains a heterologous mammalian targeting sequence.

52. The composition of claim 51 wherein the heterologous mammalian targeting sequence is ubiquitin or a signal sequence for secretion.

53. The composition of claim 52 wherein the signal sequence for secretion is human growth hormone.

54. A method of inducing an immune response in an organism comprising the step of administering to an organism an expression vector bound to a protein-polycationic polymer suspension wherein the expression vector comprises a promoter polynucleotide sequence operatively linked to a polynucleotide sequence encoding an antigen.

55. The method of claim 54 wherein the immune response is systemic.

56. The method of claim 54 wherein the immune response is mucosal.

57. The method of claim 54 wherein the immune response is both systemic and mucosal.